



#### Reel Lock

To unlock the reel turn the plastic lock handle in the direction shown until it touches the frame.



#### To Test Entire System

Hold the control pin on the probe against the stud on the back of the axle at the same time touch the probe body against the screw on the frame. The buzzer will sound if the system is ok. Sensitivity knob should be turned fully clockwise.

## Equipment Check

- 1 Test circuit and battery by pressing the test button. If the unit does not sound, adjust the sensitivity knob on the faceplate and make sure the panel securing knobs are tight (see diagram). If the unit still does not sound, replace the battery (one 9 volt) in the drawer on the faceplate and repeat the tests.
- 2 Test tape and probe by shorting out the centre conductor and probe body on the pin on the back axle of the unit while touching the white band on the probe with a moistened finger. The buzzer and light should activate; if not, adjust the sensitivity and repeat.
- 3 Test the unit in tap water before going out to the field. **DO NOT** use distilled or deionized water.
- 3 Wash reel if necessary. The central electronic panel can be removed and the reel washed down. Unthread the panel securing knobs and carefully pull out the central panel. Disconnect the panel from the tape. The reel may be cleaned with the following: soap solution, naphtha alcanox 10%, Fantastic, Windex, Joy, Top Job, Mr. Clean, Formula 409; hexane, heptane, white kerosene, mineral spirits; methyl, isopropyl, isobutyl and 1 + 3 denatured alcohols; freons TF + TE. Rinse well with water and let dry before putting the panel back in. **DO NOT** use abrasives, partially halogenated hydrocarbons or ketones to clean the reel.

## Use in the Field

- 1 Reel the tape down the well carefully, avoiding the edge of the casing. Hang the unit on the casing where possible and run the tape over the frame leg to avoid cuts and nicks.
- 2 When the unit sounds, carefully measure the depth to water from your reference point by slowly lowering and raising the probe to the air/water interface. Raise the probe, shake off the water and repeat the measurement. In wells with cascading water, reduce the sensitivity by turning down the sensitivity knob (anti-clockwise) to minimize false signals.
- 3 The probe is rated to full depth and can be used to measure depth to bottom of well. Reel the tape until the probe touches bottom and the tape becomes slack. **DO NOT** let the probe fall under gravity or it will be damaged when it hits the bottom of the well. **DO NOT** use the unit to measure sand backfill as the tape and probe may get "locked" in the backfill.
- 4 Wind the tape back onto the reel, removing any excess moisture and dirt.

## Cleaning the Meters

- 1 Always clean the meters after use in the field to maintain optimal performance and extend the life of the unit.
- 2 Unwind the tape and probe and wash with a mild detergent. Rinse well, wipe and rewind onto the reel. The tape and probe can be cleaned and degreased with the following: soap solution, naphtha alcanox 10%, Joy detergent 10%, Lestoil; methyl, isopropyl and isobutyl alcohols; hexane, heptane and fully halogenated freon. Rinse thoroughly with water afterwards.

## Trouble Shooting

### No Sound when the unit is tested

- 1 Check battery by pressing test button. Replace battery if low and make sure panel securing knobs are tight. If unit still does not sound, remove central panel and check all connections.
- 2 Check probe conductor to make sure it is clean and not crusted with mineral deposits. Check tape/probe connection for any breaks.

### Continuous Sound when the unit is turned on or probe removed from water.

- 1 Make sure probe conductor tip is clean.
- 2 Check for excess moisture on the back of the electronic panel and check the test button.
- 3 Check probe/tape connection and tape for any breaks or leaks where water might get in.

## General

- Avoid sharp edged casing
- Avoid entanglement with other equipment in boreholes and wells.
- Do not use to plumb borehole depths
- Do not use as guide to backfilling with sand etc. Instrument may get locked in sand.
- Rewind tape onto reel after each use

**Warranty is conditional upon adherence to these guide lines.**

### Important:

Ensure that the Panel Securing Nuts are tight before use.